Annual Drinking Water Quality Report for 2009
The Town of Oakland
PWSID # 0110008
April, 2010

We're pleased to present to you this year's Annual Water Quality Report. This report is designed to inform you about the water quality and services we deliver to you every day. Our constant goal is to provide you with a safe and dependable supply of drinking water. We want you to understand the efforts we make to continually improve the water treatment process and protect our water resources. We are committed to ensuring the quality of your water. The Oakland Water System obtains all of its raw water from two separate sources. Source #1 is the Youghiogheny River and it supplies water for the Bradley Lane Water Treatment Plant which is located off of Bradley Lane in Oakland. Source #2 is called Broadford Lake, which is located just off of Broadford Road and it supplies water for the Broadford Water Treatment Plant. Once the water is treated, it is pumped directly to the customer with excess capacity held in reserve at our 800,000 gallon water storage tank to meet daily needs. Water from both sources is blended together in this storage tank.

This report shows our water quality and what it means.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by cryptosporidium and other microbiological contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

If you have any questions concerning this report or your water utility, please contact Randy Sharpless at the Oakland Water Department at 301-334-3836 or Mayor M. Jamison at 301-334-2691. The Mayor and Town Council of Oakland holds regularly scheduled meetings on the first Monday of the month at 7:00 PM in the Council Chambers, 15 South Third Street, Oakland, Maryland. Please call 301-334-2691 to schedule your topic on the agenda for discussion at any regularly scheduled meeting.

The Town of Oakland routinely monitors for contaminants in your drinking water according to Federal and State laws. This table shows the results of our monitoring for the period of January 1st to December 31st, 2009. As water travels over the land or underground, it can pick up substances or contaminants such as microbes, inorganic and organic chemicals, and radioactive substances. All drinking water, including bottled drinking water, may be reasonably expected to contain at least small amounts of some contaminants. It's important to remember that the presence of these contaminants does not necessarily pose a health risk.

In this table you will find many terms and abbreviations you might not be familiar with. To help you better understand these terms we've provided the following definitions:

Non-Detects (ND) - laboratory analysis indicates that the contaminant is not present.

Parts per million (ppm) or Milligrams per liter (mg/l) - one part per million corresponds to one minute in two years or a single penny in $10,000.

Parts per billion (ppb) or Micrograms per liter - one part per billion corresponds to one minute in 2,000 years, or a single penny in $10,000,000.

Parts per trillion (ppt) or Nanograms per liter (nanograms/l) - one part per trillion corresponds to one minute in 2,000,000 years, or a single penny in $10,000,000,000.

Nephelometric Turbidity Unit (NTU) - nephelometric turbidity unit is a measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

Action Level - the concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

Treatment Technique (TT) - A treatment technique is a required process intended to reduce the level of a contaminant in drinking water.

Maximum Contaminant Level - The "Maximum Allowed" (MCL) is the highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

Maximum Contaminant Level Goal - The "Goal"(MCLG) is the level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

TEST RESULTS						
Contaminant	Violation Y/N	Level Detected	Unit Measurement	MCLG	MCL	Likely Source of Contamination
Microbiological Contaminants						
Turbidity				N/A	TT	Soil runoff
Broadford Plant	N					
Average		0.09	NTU			
Range		.03 –.25	NTU			
Bradley Lane Plant	N					
Average		0.09	NTU			
Range		.04 -.24	NTU			
Inorganic Contaminants						
Copper – Distribution (2008)	N	0.14	ppm	1.3	AL=1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Fluoride (average)			ppm	4	4	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Broadford Plant	N	0.85				
Bradley Lane Plant	N	0.90				
Lead – Distribution (2008)	N	0.0	ppb	0	AL=15	Corrosion of household plumbing systems, erosion of natural deposits
Nitrate (as Nitrogen)			ppm	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Broadford Plant	N	< 0.2				
Bradley Lane Plant	N	0.26				
Barium			ppm	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Broadford Plant	N	0.035				
Bradley Lane Plant	N	0.047				
Synthetic Organic Contaminants including Pesticides and Herbicides						
Dalapon			ppb	200	200	Runoff from herbicide used on rights of way
Broadford Plant	N	ND				
Bradley Lane Plant	N	0.28				
Volatile Organic Contaminants						
TTHM (Distribution) (Total trihalomethanes]	**Y**	**109.06 (avg.)**	ppb	0	80	By-product of drinking water chlorination
HAA5 Haloacetic Acids (Distribution)	**Y**	**64.13 (avg.)**	ppb	0	60	By-product of drinking water chlorination

Additional test results for unregulated contaminants were as follows.

Unregulated Contaminants						
Sodium Broadford Plant Bradley Lane Plant	 N N	 21.6 12.4	ppm	N/A	N/A	Erosion of Natural Deposits
Chloroform Broadford Plant Bradley Lane Plant	 N N	 102.0 72.1	ppb	N/A	N/A	By-product of drinking water chlorination
Bromodichloromethane Broadford Plant Bradley Lane Plant	 N N	 4.3 2.7	ppb	N/A	N/A	By-product of drinking water chlorination

Note: Test results are for year 2009 unless otherwise noted. Not all contaminants are required to be tested for annually.

TTHMs [Total Trihalomethanes]. Some people who drink water containing trihalomethanes in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous systems, and may have an increased risk of getting cancer.

HAA5s [Haloacetic Acids] Some people who drink water containing haloacetic acids in excess of the MCL over many years and may have an increased risk of getting cancer.

Beginning in 2004 the MCL for total trihalomethanes (TTHM) was lowered to 80 ppb as a running annual average for systems of our size. Our system is required to do two (2) samples per quarter. These contaminants are formed by the reaction of our chlorine disinfectant with naturally occurring organic materials which are carried into our sources through runoff from rainfall. Our 2009 average exceeded this standard. As a result of this, our system was sent a violation notice by Maryland Department of the environment (MDE). The duration of the violation was from January 1 thru December 31, 2009. Quarterly averages during this calendar year were between 88 and 109 ppb. Potential adverse health effects are: Some people who drink water containing trihalomethanes in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous systems, and may have an increased risk of getting cancer. We are continuing to monitor our disinfection processes closely and making adjustments as necessary to minimize the formation of disinfection by-products. We continue monitoring on a quarterly basis for total organic carbon (TOC), which is a measure of the potential for disinfection by-products formation. Through the addition of an oxidizing material into our raw water flow prior to plant entry, we are continuing our efforts to lower TOC levels.

Our system also received a violation notice this past year for haloacetic acids (HAA5s). The MCL for this contaminant is 60 ppb based on a running annual average. Two (2) samples are required per quarter. These contaminants are formed by the reaction of our chlorine disinfectant with naturally occurring organic materials which are carried into our sources through runoff from rainfall. Quarterly averages for this contaminant during this calendar year were between 64 and 84 ppb. Potential health effects are: Some people who drink water containing haloacetic acids in excess of the MCL over many years and may have an increased risk of getting cancer. Our efforts to lower this contaminant are as above thru lowering of TOC levels, which is the contributing factor for disinfection by-product formation.

During 2009 an engineering study was completed to recommend plant improvements to lower formation potential for DBPs (disinfection by-products). Based on this study, our system has requested bids for design engineering to address these recommendations. During 2010 a firm will be selected and it is anticipated that construction work on plant upgrades will be started in 2011. The Town of Oakland continues to work closely with MDE to accomplish these improvements so that our system may return to full compliance. This includes pursuit of funding sources.

During 2009 we were required to do standard testing for TTHMs and HAA5s at 2 additional sites in our system to determine the highest potential levels for formation of disinfections by-products. This was required under a new rule called the Stage 2 Rule for Disinfection By-Products. These results are in the following table and they are currently unregulated. In CY 2013, 2 of these sites will become compliance monitoring sites replacing the currently used sites.

Sample Sites	TTHMs Results	HAA5s Results	Average TTHMs	Average HAA5s
Overlook Judy Ctr.	Range 35.6 to 308.0	Range 39.0 to 83.6	141.3	65.9
GC Health Dept.	Range 38.4 to 170.0	Range 41.1 to 100.0	98.5	65.0

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. The Town of Oakland is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your drinking water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the EPA Safe Drinking Water Hotline at 1-800-426-4791 or at http://www.epa.gov/safewater/lead.

NOTE: As can be seen by results listed in the above tables, lead, which is tested for triennial (every 3 years) in accordance with Federal and State regulations in Oakland's distribution system, was not detected in samples collected in 2008.

All sources of drinking water are subject to potential contamination by substances that are naturally occurring or man made. These substances can be microbes, inorganic or organic chemicals and radioactive substances. All drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline at 1-800-426-4791.

MCL's are set at very stringent levels. To understand the possible health effects described for many regulated contaminants, a person would have to drink 2 liters of water every day at the MCL level for a lifetime to have a one-in-a-million chance of having the described health effect.

Please call our office at 301-334-3836 if you have questions.